



# Aviation Maintenance Duty Officer ASSOCIATION Newsletter

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## The Business of Naval Aviation

By Mike Hardee ('77)

We've been in this Naval Aviation Maintenance business for a long time now; as long as we've had aircraft to launch, recover, re-arm, maintain and fix, daily and turnaround. We've not only done it well, we've proven many times over that we can prepare aircraft for tasking and combat better than any other navy in the world. Think about it for a minute. Nobody, but nobody does what we do or even has a clue how hard and logistically complex a set of processes it is to prepare aircraft for tasking like we do it; at anytime, anywhere on this planet. No other nation has acquired the level of readiness and combat capability that our Navy has today. We managed to get 7 CVs plus a stand-by and 3 ARGs out of town for OIF— think about that logistical feat! Most of the time, we don't slow down enough to even realize that, and as such, we take for granted just how good we really are. The leadership needs to remind the troops of this.

Just as importantly, we take for granted how much it costs to do all the above, because just as nobody else can do what we do—neither can anyone else afford what and how we do it today. As great as we are--we can't continue to perform these functions at ever increasing costs, or we'll eventually price ourselves out of business. Notice the word "business". Before you skip the rest of this for the next article, read the next two paragraphs carefully please. I mentioned it as allegory in the first sentence, but in reality, Naval Aviation is a business. It is a series of processes that require inputs to produce a product, provide a beneficial service and or profit. Our profit is ready for tasking aircraft to meet our nation's requirements at least cost. We have not been operating at a profit. We've achieved our readiness at any cost — and in most cases, been darn proud of it — happily relating the Herculean efforts to get the job done for our skippers. Until recently, we've neither been remotely aware nor concerned about the cost of doing our business.

If we are going to recapitalize (another business term, folks) our Naval Air Force with newer, more capable equipment (read new airframes), that condition must change. War is a clash of economies — whomever has the most productive, biggest and/or most efficient one wins. In battle, the forces that expend the least amount of resources to get the their lethal force effectively applied with the most precision and the most impact (or desired effect) at least cost to themselves are the ones that win.

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### Featured Articles

Would you like that data digitized? ..... Randy Weakley  
NADEPs & Cost-Wise Readiness ..... Jim Woolway  
The Reserve Wing ..... Rusty Robertson  
VAH-21 ..... John Roach  
The Changing Face of Europe ..... Eric Dean

### <http://www.amdo.org>

Make it a matter of routine to check the AMDO Association Web Site daily. We're always adding information and articles of interest to the community. Here's what you'll find:

- Breaking news of interest to both active duty and retired AMDOs
- Selection board results as soon as they are released
- E-mail addresses for hundreds of AMDOs, plus our LDO brethren (*Check yours and make sure its up-to-date*)
- ALNAVs of interest to AMDOs
- Link to the latest AMDO Directory, electronically
- The latest AMDO FTS Directory
- AMDO Photo Gallery for your entertainment
- The Aviation Maintenance Encyclopedia
- ....and much, much more

**Check it daily!**

### Is It Membership Renewal Time??

**Check the mailing label** on your Newsletter. If the membership expiration date above your name is **December 2004** or prior, please renew now. Send your renewal check (\$10 or \$20) to the AMDO Association at the address on the back cover OR you can renew with your plastic via PayPal at [www.amdo.org/members.html](http://www.amdo.org/members.html). While you're at it, update us on your phone numbers and e-mail addresses as well as what you've been doing lately. *Thanks!*

We do send e-mails to remind you when renewal is due, but keeping ahead of the game is truly appreciated.

## The Business of Naval Aviation (con't from page 1)

OK, you're thinking, "Hardee's gone Harvard Business Case/Rand Think Tank on us now". No, actually it is a lot simpler than that.

It is all about how many airframes we thought we were going to buy this year and didn't. We didn't because we couldn't afford to buy even half of what we had planned and budgeted for in the POM 5 years ago. We lost the ability to buy those other new aircraft through the current cost of readiness--getting our current legacy aircraft, with over 20 years of over-utilization, ready for deployment--and continuing in the practices of their consumption. The average age of naval aircraft is now older than our Naval ships. Most of our airplanes are now older than most of our plane captains. Yes, the current aircraft are being consumed at a rate that the cost of maintaining them far outstrips our ability to buy new ones. This current condition is our "burning platform" and is going to change how you do "business"--like it or not. Ready or not, changing that condition will take some serious leadership engagement and process improvement tools.

This is where your leadership and Enterprise AIRSpeed come in.

When you take a look at most of our processes, even our quality and safety of flight requirements, there are four top-level metrics that shape our maintenance behavior. Inventory--how much stuff do we have (people, material, SE, aircraft, etc)? Reliability--how well are we doing (quality of product/ Time-on-wing/First Pass Yield)? Cycle Time--How long does it take (driven by people & processes) to get the job done? Cost of doing all this is (realize it or not) going to drive cost reduction initiatives and that requires a complete understanding of our baseline production efforts to identify cost reduction impacts and opportunities. OK, so just what is this Enterprise AIRSpeed and just how does it fit in all this? Here's what I've termed it to be as I've been working with my implementation teams applying these process improvements throughout the IMAs...

Enterprise AIRSpeed is a combination of process improvement tools. It uses an over-arching architecture of Theory of Constraints (TOC) to illuminate areas that need the application of waste and cycle time reduction techniques like Lean and 6 Sigma. What it does is enable effective and efficient preparation of Cost-Wise RFT aircraft in support of FRP. Let's review those underlined words because they have precise meanings.

- Enable--using AIRSpeed tools in order to be....
- Effective--at meeting RFT/M rating requirements...
- Efficient-- at iteratively reducing costs (Remember, you have to be effective before you can become efficient.)
- Preparation – maintenance, repair and replenishment of equipment (end-items)

By using AIRSpeed to implement these tool applications in a global enterprise manner, we work at addressing all the interdependencies between the participants of the Naval Aviation enterprise from ASD, to the depot, to the OEM and all touch points in between the aircraft and the providers. The end result is reducing our cycle time to prepare ready for tasking aircraft, increase the time-on-wing of our components, reducing our operating costs by reducing man-hours and the need to operate with large inventories of materiel. This reduction in the cost of doing business is what will free up more resources, enabling us to buy new airframes in the Navy's recapitalization efforts. That is how important a successful AIRSpeed implementation is to Naval Aviation.

Remember, this isn't a localized effort (though it seems that we're implementing one site at a time), but an *enterprise* approach. If this is done right, it creates a continuous process improvement environment; it should align and optimize Maintenance and Supply activities to end-user demand (Operations) as well as leveraging existing initiatives. Yes, it is cultural change, but the synergy of this set of industry tools can and will eliminate sub-optimization, improve upon the local leadership's ability to make local decisions with global impact known and creates a "pull" system, instead of the traditional legacy "push" system, where you fixed *everything* that came in the door. If you're focused on doing 10,000 things, then I say you are focused on nothing. Figuring out what the "vital few" are to do becomes critical to getting the operators the improved readiness they need at least cost.

Again, what do we get out of this? We reduce total cost of Naval Aviation, by eventually reducing inventory that we don't need or use, thereby reducing operating expenses and the man-hours required to prepare RFT aircraft in support of the Fleet Readiness Plan. The added bonus and advantage is that our legacy logistical support gets the opportunity to transform itself into a far superior and more integrated maintenance and supply support system with more seamless support to the Fleet. The consequences of implementing AIRSpeed correctly are direct improvements in Logistics/Maintenance response, general decreases in cycle time and a decrease in our logistics footprint. Most importantly, it places ownership and accountability at the appropriate levels.

Defining what AIRSpeed is and how it is applied is much easier than actually going in an IMA and leading the implementation/change effort, because that's what it really is all about--change management. AIRSpeed will change how you do business, period. Its not news that change is hard. This is what I call advanced leadership; if you're not out in front of it and fully engaged in the effort I can guarantee you the change will not sustain itself and it will become painfully apparent to everyone, especially the troops. The risk of leadership being seen as ineffective in this effort has never been higher, but the clearly demonstrated rewards of massive paybacks in readiness, productivity, surge capability, quality of service, unit pride and quality of the work place for the troops has never been higher either. Again, nobody is as good at

what we do today, but Enterprise AIRSpeed provides the ability to go to even higher levels of expertise and effectiveness with much less resources.

We've implemented now three Hornet sites — NAS Oceana, NAS Lemoore and MAL3-31 in Beaufort, with incredible success in resource savings—go ask them about it. We're getting ready to start 4 more simultaneous implementations the first of the year, 8 more in June. Here's what we've learned from this implementation.

This is a path of discovery—you're going to be surprised by what you learn and what you thought you knew. (I continue to be.) Leadership needs to fully support this effort and be visibly engaged in it. At the risk of repeating myself, VISIBLE leadership buy-in and engagement is a *sine qua non*. Attitude is everything in this effort. While persistence, tenacity and passion are essential ingredients; this is a marathon, not a sprint. You get what you measure, so make sure you make the measurement count for something that is meaningful. There are no sacred cows in policy--everything is on the table. Challenge policies both local and global (including NAMP, P485, OPNAV 5442, DODINST 3110); both written and unwritten. If there are barriers encountered that can't be locally mitigated, then they need to be elevated up the chain. Also challenge your cycle time in any repair activity—is it the best that it can be? What can get it reduced even more? Is your leadership taking responsibility for new repair design and their consequences, or just delegates the issues up the chain? Document lessons learned; if nothing but to share them with the troops and your colleagues in order to develop community better practices..

Here are some **Do's**:

- Engage and train your leaders and prime influencers first
- Establish a "Burning Platform" sense of urgency
- Coach, Cheer, Celebrate your accomplishments
- Refresh education continually at all levels
- Select the best and dedicate them full-time — yes, it is an investment
- Select the right projects — ones that are meaningful and provide an ROI
- Begin with the end in mind....
- Remove the clutter from your operations
- Drive speed by reducing cycle time, not by speeding up processes
- Focus on results....Live the process
- Remain flexible in your approach. ("Life is what happens to you while you're planning something else.")
- Visibly celebrate each accomplishment

Here are some **Don'ts**:

- Work from the bottom-up
- Tolerate apathy, or this is just another "flavor-of-the-month" attitude
- Exclude the customer and your suppliers - they are part of your team in change leadership.

Speaking of customers and suppliers, *alignment* is everything in this business. We should be always cognizant of our local and global enterprise partners and their success and or failures, how they are doing it, and, most importantly, why are we as an enterprise successful? We also need to network a lot more than we currently do as a community in order to resolve the lack of transparency between our current processes (stovepipes of activity), understand and further develop the *best metrics that have true cause-and-effect*; and last but not least--build in the accountability and discipline with those processes in order to get the right results. Results that enable Cost Wise Readiness in the preparation of ready for tasking aircraft in support of the FRP.

Of the skill sets we need more of today and do not demonstrate well, it is the development of high performance teams. It is the networking and collaboration of those hierarchical, high performance teams that we are most lacking. We, as a community, also need to bring more well-developed and active skill-sets and specialties to the table: RCM, CPL, ACQ, Manpower, PQM, LEAN, 6 Sigma, TOC, PMV, IT, Business/Finance, etc., earlier in our careers. Our future leadership must have good corporate business and finance knowledge, besides advanced leadership skill-sets. But without the ability to collaborate within our own community and our peers locally and globally in establishing, maintaining and growing high-performance teams, we will continue to marginalize our successes to individual events, by organizational code. We need to work across the enterprise stovepipes of activity to achieve a greater NAVY solution to its problems. We need to get beyond "the best we can do is affect local conditions", which at best only marginalizes the individuals' and their org code's labors towards excellence. That's why Enterprise AIRSpeed was developed.

While you're waiting for Enterprise AIRSpeed "to come to a theatre near you", learn from some websites already linked in the AMDO site. Take the NKO courses in Lean and 6 Sigma; TOC coursework is getting developed for inclusion into the NKO. If there is an implementation going on nearby, see if you can get into the technical expert or deployment expert course (a week each). Take the Navy Business Course, too. There's plenty of material and books out there on all of these process improvement tools. You can't miss them — your industry counterparts rely on them heavily in order to improve their bottom line and stay in business. If you're near one, get involved in an Rapid Improvement

Event/Accelerated Improvement Workshop. Seek and benchmark with local industry around you that is working on the same sort of process improvement activity.

Frankly, I envy the folks in the IMAs today. (Don't worry, O level will get *AIRSpeed* too; its probably going to be the rest of my career path.) You have tools I wish I had as a maintainer when I worked in and led an IMA. You folks out there are on the cusp of great and magnificent changes in productivity. A reminder, Enterprise *AIRSpeed* /NAVRHIP is a CNAF program and has the support of top Navy leadership, and they are placing great expectations upon your efforts at implementation. So it becomes part of your day job now. Process improvement tools are great, but...this is really all about cultural change. If it were easy, then anyone could do it. That's why we're counting on all of you out there.

*Capt Hardee is the NAVAIR Enterprise AIRSpeed Project Officer.*

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### **IN THE NEWS.....**

- ☑ Congrats to USS Abraham Lincoln (CVN72) for winning a Secretary of Defense Maintenance Award (large category) in recognition of outstanding achievements in field-level military equipment and weapon system maintenance.
  
- ✝ Bill Rush, YG 55, one of the Original 100 AMDOs, passed away on 6 October. Capt. Rush enlisted in the Navy in 1941 and served his country on active duty for 46 years. He served in seaplanes in the South Pacific in World War II. Later, he served in Japan during the Korean conflict and as an aircraft maintenance officer aboard his beloved USS Hancock, CVA-19, during the Vietnam conflict. During the late 1970s and 80s, Capt. and Mrs. Rush also had overseas tours in Puerto Rico, Italy and Greece. His final tour of duty was as commanding officer of NAVMASSO, now a part of the Space and Naval Warfare Command, from 1981 until his retirement in 1987.
  
- ☑ CNAP and CNAL N42 staffs merged on 1 October and are now COMNAVAIRFOR N42. There is now a single CNAF N42 staff with three directorates (readiness, asset management, and policy) located in San Diego and Norfolk. The functions of each competency will be performed in either Norfolk or San Diego, eliminating duplication of functions on both coasts. This change will foster development of one set of CNAF processes. CNAF N41 and N42 will no longer view the naval air forces as bi-coastal.

CNAF N42 will be led by an Assistant Chief of Staff in San Diego and consist of the policy, readiness and aircraft material/engineering directorates. Functions will include management and scheduling of aviation maintenance management inspection teams, NAMP oversight, O and I Level maintenance process development (including NAVRIIP and *AIRSpeed*), training and analysis departments.

The N42 Readiness Directorate located in Norfolk will function as the single point of entry to resolve current readiness issues. The directorate will be organized around the following divisions: Carrier Strike Group (CV/CVN AIMD, CVW, and associated LAMPS Detachments), Expeditionary Strike Group (LHA/LHD, ACE, associated LAMPS detachments, all non-CVW USMC aviation, including MALS), and shore readiness (FRS, shore based VP/VQ/Helo Dets, shore AIMD, etc.). USMC/3rd MAW/OIF AMRR support will be unchanged and provided from San Diego as currently structured. Expect support for all USMC to be provided from Norfolk effective Apr 05.

The N42 Aircraft Material and Engineering Directorate will be located in Norfolk. Functions include technical and inventory management of aircraft, avionics, support equipment, engines and common equipment.

- ☑ COMFAIRMED aviation maintenance support staff (Code N42) has been disestablished.